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| APPLICATION NO.              | FILING DATE                             | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.    | CONFIRMATION NO |
|------------------------------|---|-------------------------|------------------------|-----------------|
| 10/753,669                   | 01/08/2004                              | Donald C. Roe           | 7537CQ                 | 1141            |
| 27752 7                      | 7590 10/20/2006                         |                         | EXAMINER               |                 |
| THE PROCTER & GAMBLE COMPANY |   |                         | STEPHENS, JACQUELINE F |                 |
|                              | 'AL PROPERTY DIVIS<br>L BUSINESS CENTER |                         | ART UNIT               | PAPER NUMBER    |
| 6110 CENTER HILL AVENUE      |   |                         | 3761                   |                 |
| CINCINNATI, OH 45224         |   | DATE MAILED: 10/20/2006 |                        |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |  |  |  |  |
|--|--|---|--|--|--|--|
|  | Application No.  | Applicant(s)  |  |  |  |  |
| Office Action Summary  | 10/753,669   | ROE ET AL.  |  |  |  |  |
| omee Action Cummary  | Examiner   | Art Unit  |  |  |  |  |
| The MAILING DATE of this communication app   | Jacqueline F. Stephens   | 3761  |  |  |  |  |
| Period for Reply   | ears on the cover sheet with the c   | orrespondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | N.<br>nely filed<br>the mailing date of this communication.<br>D (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on   | _•   |   |  |  |  |  |
| 2a)⊠ This action is FINAL. 2b)☐ This   | ∑ This action is FINAL. 2b)  This action is non-final.   |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45   | 53 O.G. 213.  |  |  |  |  |
| Disposition of Claims  |  |   |  |  |  |  |
| 4) Claim(s) 1-52 is/are pending in the application.  |  |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-52</u> is/are rejected.  |  |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  | I de la lace   |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.  |   |  |  |  |  |
| Application Papers   |  |   |  |  |  |  |
| 9) The specification is objected to by the Examine.  | r.   |   |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction  | ·  |   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office   | Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |  |   |  |  |  |  |
| <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>  |  |   |  |  |  |  |
| ·  |  |   |  |  |  |  |
| <ol> <li>Copies of the certified copies of the prior<br/>application from the International Bureau</li> </ol>  | <del>-</del>   | ed in this National Stage   |  |  |  |  |
| * See the attached detailed Office action for a list   |  | ed.   |  |  |  |  |
|  | ,  |   |  |  |  |  |
|  |  |   |  |  |  |  |
| AM-2-h-2-4/2)  |  |   |  |  |  |  |
| Attachment(s)  1) \( \sum \) Notice of References Cited (PTO-892)  | 4) 🔲 Interview Summary   | (PTO-413)   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da  | ate   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 5) Notice of Informal P  | Patent Application (PTO-152)  |  |  |  |  |
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#### **DETAILED ACTION**

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## Response to Arguments

1. Applicant's arguments with respect to claims 1-52 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-11 and 15-52, as best understood by the examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart et al. USPN 5468236.

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As to claims 1-10 and 40-47 Everhart teaches a disposable absorbent article comprising a sensor for detecting analytes in bodily waste or on a user's skin. Everhart discloses a disposable article comprising a topsheet **14**, a backsheet **12**, and an absorbent core **16** as claimed ('236 Figure 2). Everhart disclose the target analyte may include a health or nutritional marker ('236 col. 3, lines 10-29), which may be an enzyme, endogenous secretion, proteinaceous matter, or microorganism (col. 3, lines 56-65).

Everhart does not specifically disclose a sensor capable of detecting a low level of analyte. Applicant point out the present application discloses chemical sensors generally do not have either the high selectivity or the amplification properties of biosensors, and therefore, are not well suited to detect biologically reactive analytes, especially when they are present in low concentrations and/or in complex media such as bodily wastes. However, Everhart teaches a chemically reactive substance acting upon mammalian bodily excrement that provides the types of substance present and an estimate of the concentration of the substance (col. 3, lines 21-29). Everhart additionally teaches the minimum amount is simply that amount which is necessary to activate the chemically reactive means and this minimum amount is in part dependent upon the concentration in the mammalian bodily excrement of the specific substance of interest. Everhart further teaches this minimum threshold level is readily determined by one of ordinary skill in the art with routine experimentation (col. 4, lines 3-19). Based on the teaching of Everhart, it would have been obvious to one having ordinary skill in the

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art to provide a chemical sensor capable of detecting low levels of analytes by optimizing the threshold level of the chemically reactive means. Moreover, discovering optimum values only involves routine skill in the art, *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 11, 15-20, 26-35, the invention of Everhart provides a visual indication of a substance upon reacting with body excrement. Body excrement, particularly perspiration, may not necessarily provide clinically observable symptoms, such as a skin rash. In this manner, the invention of Everhart would provide information to the wearer prior to clinically visible symptoms. The sensor provides a signal to the wearer, caregiver, or an actuator ('236 Abstract) as broadly as claimed.

Regarding claims 21 and 23, the sensor is affixed to a substrate ('236, col. 6, lines 4-6).

Regarding claims 22 and 24, the sensor is detachable from the article ('236 col. 6, lines 26-32).

Regarding claims 25 and 48, the sensor may adhere to a wearer's skin ('237, Abstract).

Regarding claims 36-39 and 49-52, Everhart describes a biosensor for detecting a target analyte upon excretion of bodily fluids or waste materials. Everhart provides a response within a period of time that stays valid until the article is discarded. The response factor would have been obvious by optimizing the type of biosensor materials since the invention of Everhart is used in the same environment and problem that is

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solved is the same as the claimed invention. Moreover, discovering optimum values only involves routine skill in the art, In re Boesch, 617 F. 2d 272, 205 FUSPQ 215 (CCPA 1980).

5. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart in view of Al-Sabah USPN 5868723. Everhart disclose the present invention substantially as claimed. However, Everhart fail to disclose the disposable article has a transducer and an actuator. Al-Sabah discloses an absorbent article comprising an acoustic transducer 29 and an actuator 43, which comprises a power source 42(Figure 7). The actuator performs a responsive function when the sensor detects an input (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a transducer as taught in Al-Sabah to the sensor apparatus of Everhart. Doing so would provide a means for alerting the user or a health care professional of the presence of the target analyte.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F. Stephens whose telephone number is (571) 272-4937. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacqueline F Stephens

Primary Examiner Art Unit 3761

October 16, 2006